

# 3M IR Dome Camera (4mm)

## NVC-DF1

Quick Guide



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**Overview**

**1**

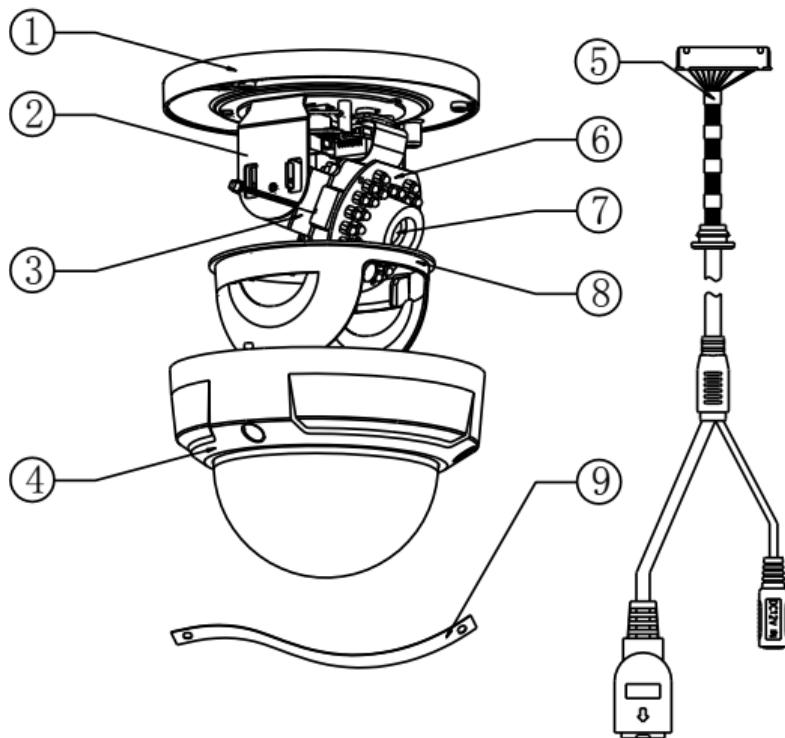


Figure 1-1 Dome camera overview

## Quick Guide **Dome Camera**

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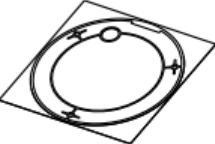
Table 1-1 Physical Description

No.	Description
1	Mounting Base
2	Horizontal Stand
3	Vertical Stand
4	Bubble
5	Cables
6	IR Led
7	Lens
8	Black Liner
9	Safety Rope

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Table 1-2 Carton contents

Camera	 A line drawing of a dome camera unit, showing the lens and housing.
Quick Guide	 A line drawing of a booklet or manual.
Drill template	 A line drawing of a circular template with three mounting holes marked with crosses.
Mounting hardware 3x Expansion screws	 A line drawing of three expansion screws.
Hex Key	 A line drawing of a hex key (Allen wrench).

***Checklist before you start***

- All carton contents present and are in good conditions.
- Ensure power supplies are off during installation.
- Power supply voltage rating as specified in product specifications.
- Installation environment is as specified.
- Contact your dealer if product does not function properly. Do not attempt to repair yourself.
- Wall or mounting platform is strong enough to withstand three times the weight of the camera.

**Steps:**

1. Drill the cable hole and the screw holes in the ceiling according to the supplied drilling template.



Figure 2-1 Drilling template

2. Loosen the set screws with a hex key (supplied) to remove the bubble.

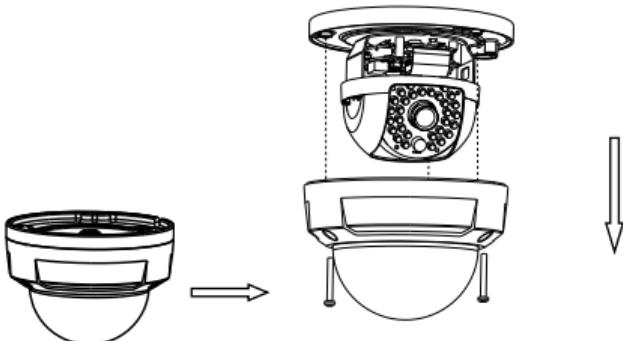


Figure 2-2 Remove the bubble

3. Connect the corresponding cables.

**Note:**

If required, you can route cables through the side opening on the side of the mounting base.

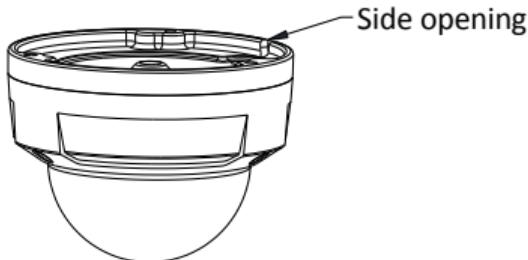


Figure 2-3 Side opening

4. Fix the mounting base to the ceiling with supplied mounting screws.

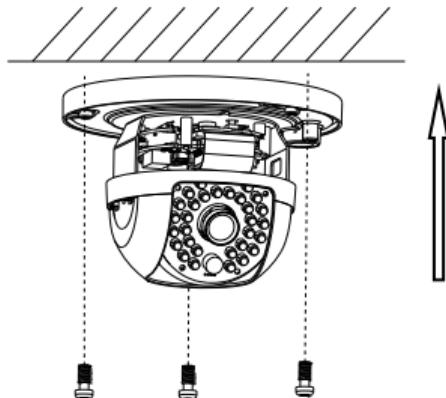


Figure 2-4 Fix the mounting base

5. Adjust the surveillance angle.

- 1). Loosen the tilt adjusting screws, and adjust the tilt angle [0~65°], and tighten the tilt adjusting screws.
- 2). Hold the black liner and rotate it to adjust the pan position [0~360°].
- 3). Remove the black liner and rotate the camera to adjust the azimuth angle [0~360°].

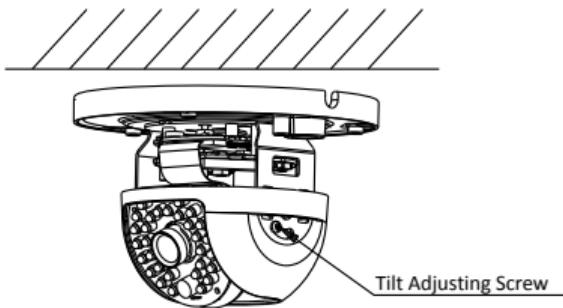


Figure 2-5 3-axis adjustment

**Note:**

As the lens has already been factory adjusted to the best imaging effect, you just need to adjust the pan position and tilt position to get the desired surveillance angle.

6. Reinstall the bubble and tighten the screws.

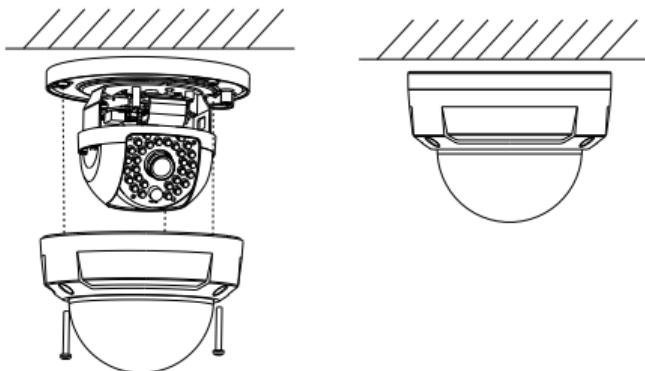


Figure 2-6 Complete the installation

## Setup using Hills' NVR

**3**

The Hills Video Security IP cameras (NVC-MB1, NVC-DM1, NVC-DT1 and NVC-DF1) have a pre-loaded protocol that works immediately with Hills Video Security NVRs (NVR-CH4, NVR-CH8 and NVR-CH16) as soon as they are connected.

Connect the camera via a network cable to one of the PoE network interface sockets at the back of the NVR.

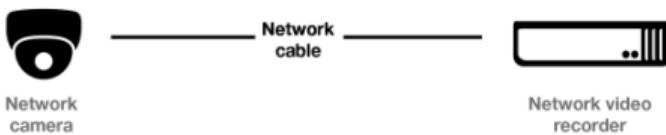


Figure 3-1 NVR – Camera connection

Please refer to User Manual of NVR to add and edit a camera.

**Setup using remote software****4**

To view and configure the camera via LAN (Local Area Network), you need to connect the network camera in the same subnet with your PC. Then install the PC Client software to search and change the IP address of the network camera.

The following figure shows the cable connection of a network camera and a PC:

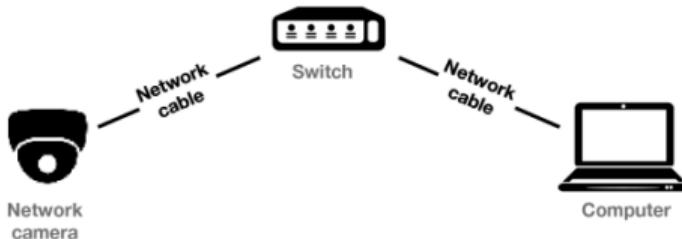


Figure 4-1 Wiring over LAN

**Set the IP address of the camera for accessing via LAN.**

**Steps:**

1. Use PC client software to detect the online devices. Please refer to the user manual of PC Client software for detailed information.

- **Search online devices automatically**

After launching the PC Client software, it automatically searches the online devices every 15 seconds from the subnet where your computer is located.

It displays the total number and information of the searched devices in the Online Devices interface.

Go to **Device Management**, and click **Server** tab on the top-left of the window, and you can see the online devices listed on the bottom-right of the window.



Online Device (5)				
Refresh Every 15s				
172.6.23.121	xx-XXXXXX	8000	XXXXXXXXXXXXXXXXXX	Yes
172.6.23.10	xx-XXXXXX	8000	XXXXXXXXXXXXXXXXXX	No
172.6.23.64	xx-XXXXXX	8000	XXXXXXXXXXXXXXXXXX	No
172.6.23.88	xx-XXXXXX	8000	XXXXXXXXXXXXXXXXXX	Yes

Figure 4-2 Search online devices

### Note:

Devices can be searched and displayed in the list in 15 seconds after they go online; they will be removed from the list in 45 seconds after they go offline.

- **Search online devices manually**

You can also click **Refresh Every 15s** to refresh the online device list manually. The newly searched devices will be added to the online list.

2. Change the IP address and subnet mask to the same subnet as of your PC.

### Steps:

- 1). Click the device to be modified in the device list and click **Modify Netinfo** to modify the network parameters.

- 2). Edit the modifiable network parameters, e.g. IP address and port number.
- 3). Enter the admin password in the Manager Password field and click **OK** to save the changes.



Figure 4-3 Modify network parameters

**Note:**

- By default DHCP is enabled. Camera will search for DHCP server for a duration of 30 seconds. If there isn't DHCP server in the network then use default fixed IP address.
- Default fixed IP address is "10.1.1.1" and Subnet mask is "255.0.0.0". The default user name is "admin", and password is "admin".

For accessing the network camera from different subnets, please set the gateway for the network camera after you log in.

Camera	
Image Sensor	1/3" Progressive Scan CMOS
Min. Illumination	0.07Lux @ (F1.2, AGC ON) ,0 Lux with IR
Shutter Speed	1/3 s to 1/100,000 s
Lens	4mm@ F2.0 (2.8mm, 6mm optional)
	2048 × 1536:
	Angle of view: 70°
	1920 × 1080:
	Angle of view: 79°
Lens Mount	M12
Day & Night	IR cut filter with auto switch
Digital Noise Reduction	3D DNR
Wide Dynamic Range	Digital WDR
Angle Adjustment	Pan:0° - 355°, Tilt: 0° - 65°
Compression Standard	
Video Compression	H.264/ MJPEG
H.264 Type	Main Profile
Video Bit Rate	32 Kbps – 12 Mbps
Dual Stream	Yes

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Image	
Max. Resolution	2048×1536
Frame Rate	50Hz: 20fps (2048 × 1536), 25fps (1920 × 1080), 25fps (1280 × 720)
Image Settings	Rotate mode, Saturation, Brightness, Contrast adjustable by client software or web browser
Backlight compensation	Yes, zone optional
ROI	Support
Network	
Network Storage	NAS (Support NFS,SMB/CIFS)
Alarm Trigger	Line Crossing, Intrusion Detection, Motion detection, Dynamic analysis, Tampering alarm, Network disconnect , IP address conflict, Storage exception
Protocols	TCP/IP,ICMP,HTTP,HTTPS,FTP,DHCP,DNS,DDNS,RTP,RTSP,RTCP, PPPoE,NTP,UPnP,SMTP,SNMP,IGMP,802.1X,QoS,IPv6,Bonjour
General	One-key reset, Flash-prevention, dual stream, heartbeat, mirror, password protection, privacy mask, watermark, IP address filtering, Anonymous access
Standard	ONVIF, PSIA, CGI, ISAPI

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Interface	
Communication Interface	1 RJ45 10M/100M Ethernet interface
General	
Operating Conditions	-30 °C – 60 °C (-22 °F – 140 °F) Humidity 95% or less (non-condensing)
Power Supply	12 V DC ± 10% PoE (802.3af)
Power Consumption	Max. 7 W with IR on
Ingress Protection level	IP66
IR Range	Approx. 10 to 30 meters
Impact Protection	IEC60068-2-75Eh, 50J; EN50102, up to IK10
Dimensions	Φ111 × 82 (4.4" × 3.2")
Weight	500g (1.1 lbs)
Part No	S47091

For further information, including full user and installation manual, and technical support please visit:

[www.hills.com.au/videosecurity](http://www.hills.com.au/videosecurity)